

**Street Lighting
Request
Policy**

**City of Orting
Washington
June 16, 2015**

**POLICY FOR WHICH ADDITIONAL LIGHTING REQUEST FOLLOWS
CITY OF ORTING BUILDING STANDARDS & OMC**

I. Policy Objective

The objective of this policy is to provide adequate illumination on residential City Streets and to maintain a standard level of service.

II. Requests

Property owners can request street lighting for public rights-of-way. The guidelines below shall be followed for deciding if a request will be denied or approved.

III. Approvals

- A. Property owners requesting additional lighting shall meet with the City's Streets and Transportation Committee to propose the request.
- B. Property owners requesting additional lighting shall petition a minimum of 90% from adjacent homeowners within 500 feet of proposed light location, including both sides of the street and on the same street as proposed light.
- C. Approval shall be made through the City's Streets and Transportation Committee and forwarded to Council for recommendation and final approval.

IV. Guidelines

- A. Intersection Lighting: Street lights are warranted at all City street intersections.
- B. Long Line Lighting: This lighting provides street lighting between intersections. If the distance between intersections is more than 900 feet, a light could be warranted. The spacing between lights should not be less than 450 feet. This type of installation can only be accomplished in an areas where electric cable is available.
- C. End of Street or Cul-de-sac: If a street is 500 feet or more to its terminus a street light is warranted. All cul-de-sacs shall have a street light at a location near the end of the cul-de-sac.
- D. Lighting shall be placed in consideration to ensure illumination for the safety of both the pedestrian and the automobile.
- E. Where sidewalks exist on one side of the street only, street lighting will be placed on that side to ensure illumination for the pedestrian.
- F. Additional lighting on a street shall be similar in style and illumination to the existing lighting.
- G. All requests shall be looked at on a case by case basis and shall follow these guidelines as close as possible.
- H. Requests that receive final approval from Council shall be given to Puget Sound Energy for installation. The lights will be installed as budget and time allows.

V. Maintenance

- A. If trees/limbs in the street right-of-way are blocking a street light the City has the authority to trim the tree branches or cut the tree down to maintain illumination and/or standard level of service.
- B. If trees are on private property and are blocking a City street light, the homeowner of that tree will be asked in writing to trim the tree in accordance of the Orting Municipal Code (OMC) Chapter 7, Section 8-7-1 thru 8-7-3. If homeowners refuse to trim the tree in a timely manner then the City will take action to trim the tree and bill the homeowner accordingly. (OMC Chapter 7, Section 8-7-4)

Street Illumination

Street Illumination shall require cut-off luminaire

Street lighting systems design shall conform to the illuminating Engineer Society of North American (IES) Standards Specification for Roadway Lighting as Outline in (RP-8-00). Puget Sound Energy (PSE) owns and maintains the street illumination system for the City of Orting.

- A.** Plats and Short Plats, Commercial, Industrial or Institutional Property Development, Street lighting is required for all public streets. The street lighting design shall be reviewed and approved by the City Engineer prior to final plat approval. The cost of all street lighting shall be paid for by the developer.

The City will accept maintenance and power cost responsibility for the public street light system when a plat is fifty percent (50%) or more occupied. Until the plat is fifty percent (50%) occupied, the developer is responsible for the maintenance and energy charges for the street lighting system.

Street lighting is not required on private streets within a plat. However, a street lighting system is encouraged. The City does not install or maintain private street lighting systems. On private streets, all street light maintenance and power costs shall be paid by the developer, homeowner, or homeowners association.

- B.** Existing Residential Ares. If a resident or group of residents desires the installation of a new street light they must apply to the City Administrator.
- C.** Commercial, Street lighting is required on all public street frontages. The developer is responsible for design, installation or relocation of new or existing lighting. Commercial development shall replace existing lighting systems on power poles with a new lighting system serviced by underground power if the system will not conflict with essential distribution lines.
- D.** Ownership and Maintenance. Puget Sound Energy (PSE) under franchise with the City provides, installs, owns and maintains the street illumination system for the City. Maintenance of the completed lighting system is provided by Puget Sound Energy.

The property owner of homeowners association shall maintain private lighting systems.

- E.** General Considerations.

Existing street light systems that extend along the frontage of a new development project, or within the limits of a roadway improvement project will not be generally required to be brought into conformance with these street lighting standards, unless the project is required to install full frontage improvements. If the City determines that existing street light systems should be brought into conformance with these requirements due to special circumstances the applicant will be notified of this requirement during the City's development review process.

When required, the applicant is responsible for the installation of streetlights and all accessories necessary to energize the street light system consistent with Standards.

For all new street light installations, the applicant shall coordinate jointly with Puget Sound Energy and the Public Works Department to prepare a street lighting plan for submittal to and approval by the City Engineer. The type of installation shall be as set forth in PSE (IES) Standard Specifications and these standards. The applicant can request that PSE design the street illumination system.

Street lighting plans shall be designed and submitted to the City Engineer for review and approval prior to construction. All lighting plans shall be prepared by a licensed engineer experienced with lighting design or by PSE (INTOLIGHT) Lighting Services). Lighting plans shall pursuant to PSE (IES) Standard Specifications and these standards.

The applicant shall coordinate with Puget Sound Energy for the availability and location of power sources for new light system.

All public street light systems shall be accessible for public maintenance by a wheeled vehicle weighing twenty-thousand pounds (20,000 lbs.).

All street light installations including wiring, conduit, and power connections shall be located underground. Exception: existing residential areas with existing above ground utilities may have street lighting installed on the existing power poles. The applicant will be responsible for providing or obtaining necessary easements for underground power for street lighting systems designed and constructed as part of an approved development permit.

As-built drawings on 22-inch x 34-inch or 24-inch x 36-inch mylar are required for all new or relocated underground street lighting systems prior to receiving a final occupancy permit.

Street light circuitry will be provided with available voltage.

The exact location of the power source should be indicated. System continuity and extension should be considered.

Particular attention shall be given to locating luminaires near intersections, at all street ends and at pedestrian and/or equestrian crossings.

- F. Illumination. Calculations should include luminaire spacing, illumination level, uniformity ration, lines loses, power source and other necessary details for the electrical and physical installation of the street lighting system.

Design Standards

- A. Illumination Levels utilizing cut-off luminaires.

Street light illumination levels shall conform to the levels listed in the table below:

Illumination Standards Average

Maintained Horizontal Illumination (Foot Candles)

Road Class	Area Class	
	Residential	Industrial/Commercial
Private(Access)	0.4	N/A
Residential (Local Access)	0.6	0.9 To 1.2
Residential (Collector)	0.6	0.9 To 1.2
Arterial*	0.8	1.2 To 1.6
* Intersection lighting is required. Street lights shall be placed in accordance with the Standards listed below.		

Uniformity Ration:

- 6:1 average to minimum for private (access)
- 6:1 average to minimum for residential (local access)
- 4:1 average to minimum for residential (collector)
- 3:1 average to minimum for arterial

Average illumination levels at intersections shall be 1.5 times the illumination required on the more highly illuminated street. Exception: Local residential streets intersecting other local residential streets shall not require 1.5 times the illumination at other intersections, provided that one luminaire is placed at the intersection.

At signalized intersections, all signal poles shall include a street light. Lighting levels at these locations may be higher than the criterial listed above.

B. Luminaires shall be cut-off

1. The following luminaires have been approved for use in the City of Orting;

Arterials:

Fixtures: PSE Hunter Green Flat Lens Cobrahead. Wattage Based on Design.
 Arms: Ameron Mo-AE Elliptical Arm. Appropriate Arm Lengths Based on design.
 Poles: Aneron 25” Mounting height Victorian 2 Fluted Green Concrete

Residential:

Fixtures: hunter Green King K823 Fanconridge Cutoff Optics Shallow Lens. Wattage Based on Design
 Arms: Hunter Green Bishops Crook.
 Poles: Ameron 13’, 15’, or 18’ Mounting Height Victorian 2 fluted Green Concrete. Based on Design & Location

2. All luminaires shall have clear lamps
3. All luminaires shall be cut-off high pressure sodium or LED Equivalent
 - a. 400 watt lamp = 50,000 initial lamp lumens
250 watt lamp = 29,000 initial lamp lumens
200 watt lamp = 22,000 initial lamp lumens
150 watt lamp = 16,000 initial lamp lumens
100 watt lamp = 9,500 initial lamp lumens
 - b. Lamp Dirt Depreciation factor (LDD) = 0.90
 - c. Lamp Lumen Depreciation factor (LLD) = 0.85
 - d. Combined LDD x LLD = 0.76

*NOTE: LED'S MAY BE CONSIDERED BY THE CITY AS AN ALTERNATIVE TO REDUCE ENERGY AND MAINTENANCE COST.

C. Lighting Standards

1. Light standards shall be located on one side of the roadway only or shall be located opposite each other when placed along both sides of the roadway.

Staggered spacing will be allowed upon approval of the City Engineer where there is an established staggered pattern and it is necessary to continue this pattern, or when site or safety conditions prevent locating luminaires on only one side of the roadway.

2. In areas where the street width differs from the City standard, or there are other factors influencing the location of the street lights, the City Engineer will provide input to the applicant on acceptable options.

Street Light poles shall be direct buried as specified by PSE Line loss calculations shall show that no more than a 5 percent voltage drop occurs in any circuits. Branch circuits shall serve a minimum of four luminaires.

Conductors: Conductor size will be determined by the wattage and circuit lengths provided through the IES design. The minimum wire size for any illumination circuit shall be No. 6 Aluminum. No. 10 wire will be acceptable for the pole and bracket cable within the light standard only.

POLICY FOR PRIVATE SECURITY LIGHTING

I. Policy Objective

- A. The objective of this policy is to guide homeowners with the understanding of private security lighting and the costs associated with owning those lights.

II. Private Security Lighting

- A. Request for private security lighting shall be made directly to Puget Sound Energy, by the property owner.
- B. Installation of lighting shall be located on homeowner's property, and not in the street right-of-way.
- C. Installation will not occur on City owned poles, trees or any other objects in right-of-ways.
- D. Costs associated with installation shall be the responsibility of the property owner.
- E. Monthly/annual or any other costs associated with the lighting on private property shall remain the responsibility of the property owner for the existence of the light.
- F. All maintenance and its costs associated with the lighting shall be the responsibility of the property owner.
- G. If current property owner should sell his/her property, all monthly/annual or maintenance costs shall be the responsibility of the new property owner.

III. Building Standards

- A. Private security lighting can come in many different forms. If a property owner wishes to install light poles near the right-of-way or on their property within the street, then there are building standards to follow. Please visit www.cityoforting.org to review these building standards.
- B. Property owners are advised to call the locate notification center prior to digging for utility locates. (800) 424-5555.
- C. Flood lights or additional security can be mounted to any building that provides adequate and safe electrical connection as deemed by Puget Sound Energy, as long as it's on the homeowners property.

IV. Orting Municipal Code

- A. Property owners who wish to install private security lighting shall follow the guidelines of the Orting Municipal Code and not create a nuisance.
- B. Lighting shall not be set towards the direction of his/her neighbors and create a nuisance.
- C. Lighting shall not be set in the direction of motor vehicles/drivers and cause unsafe driving conditions.